```
1 /*
 2 Semphr.h - Simple implementation of a semaphore for TinyTrackGPS, a simple track GPS
  to SD card logger.
 3 TinyTrackGPS v0.14
 4
 5 Copyright © 2019-2021 Francisco Rafael Reyes Carmona.
 6 All rights reserved.
 7
 8 rafael.reyes.carmona@gmail.com
9
     This file is part of TinyTrackGPS.
10
11
     TinyTrackGPS is free software: you can redistribute it and/or modify
12
     it under the terms of the GNU General Public License as published by
13
14
     the Free Software Foundation, either version 3 of the License, or
15
     (at your option) any later version.
16
     TinyTrackGPS is distributed in the hope that it will be useful,
17
18
     but WITHOUT ANY WARRANTY; without even the implied warranty of
     MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
19
     GNU General Public License for more details.
20
21
22
     You should have received a copy of the GNU General Public License
     along with TinyTrackGPS. If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/</a>.
23
24 */
25
26 #ifndef Semphr h
27 #define Semphr h
29 #include "Arduino.h"
30
31 #if defined(__arm__) || defined(ESP8266) || defined(ESP32)
32 #include <functional>
33 using fptr = std::function<void()>;
34 #else
35 typedef void (*fptr)();
36 #endif
37
38 class Semphr {
39
       public:
           Semphr(bool init = false): state(init){}
40
41
           void operator()(fptr func){
42
               if (_state) {
                    func();
43
                    _state = false;
44
45
               }
46
           }
47
           void set(){_state = true;}
           void reset(){_state = false;}
48
49
           bool status(){return state;}
50
51
       private:
52
           bool _state;
53 };
54
55 #endif
```